The Relationship Between Teaching Styles of English Instructors and Learning Styles of English Prep Class Students at a Turkish State University

Abdulkadir Durmus^{1*}. Meral Güven²

1*2 Faculty of Education, Anadolu University,
Anadolu Üniversitesi Yunus Emre Kampüsü 26470 Tepebaşı / Eskişehir, Turkey
*adurmus@anadolu.edu.tr, mguven@anadolu.edu.tr

*Corresponding Author
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Abstract: It is necessary to be aware of both teaching and learning styles and employing them in teaching and learning processes and as the two important stakeholders of this process, both learners and teachers are expected to benefit from each other at maximum level especially in terms of considering the needs of learners. This study aims to find out if there is a relationship between teaching styles of instructors working at Anadolu University School of Foreign Languages (AUSFL) and learning styles of students studying at English prep class. Data of the study were collected through Grasha-Reichmann Teaching and Learning Style Scales which Sarıtaş & Süral (2010) have adapted to Turkish. SPSS package program was used in the descriptive analyses of the study and Pearson's moment correlation coefficients in correlation calculations. Significant relationships have been identified between formal authority teaching style and avoidant learning style, and between personal model teaching style and competitive learning style. As for the other teaching and learning styles, although there wasn't any significant relationship among each other, considering the average values, it can be said that there was a linear relationship among them which led to consider that a partial relationship existed.

Keywords: Teaching, Teaching style, Learning, Learning style

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1. Introduction

One of the important aspects of the learning and teaching process emphasized by the researchers is that both processes can be associated with a certain style both for students and teachers. Although the concepts of learning style and teaching style are handled separately in most studies, it is important to consider them together in order to increase the effectiveness of the learning and teaching process.

It has been observed from the definitions of the terms in the related literature that learning styles and teaching styles include methods, trends, or actions to answer the question of "how of learning and teaching" from the perspectives of the learners and teachers. The definition of learning style varies as there is no one standard "globally-accepted" connotation for it (Halif et al., 2020). While Woolfolk (1998) defined learning style as an approach to learning and studying, Keefe (1990) defined it as affective, cognitive and physiological behavior characteristics that direct how the student learns, perceives and interacts with the learning environment. As for Honey and Mumford (1995), they explained learning style as the preferences of the individual in his/her learning activities. Based on all these definitions, learning styles can be defined as the tendency of individuals towards learning. Dunn (1992), who has important studies on learning styles, states that uniqueness and individual learning styles of the individual should be respected in learning styles, and learning style functions in accordance with the strengths and weaknesses of the individual shaped by heredity and experience.

According to Grasha (2002a), teaching style consists of behaviors that teachers exhibit during their teaching activities. While defining teaching style, Fischer and Fischer (1979), Felder (1993), Heimlich and Norland (1994) and Felder and Silverman (2002) focused on the harmony between the teacher's presentation of information and the interaction with the students, the harmony between the teacher's behavior in the teaching process and the educational beliefs, and the educational activities of the instructor, and they focused on the unique and consistent qualities peculiar to each teacher individually. Accordingly, teaching styles can also be defined as the ways the teacher takes towards teaching.

In order to pursue an effective learning and teaching process, it is considered important and necessary for teachers to be aware of their own teaching styles and for students to be aware of their own learning styles (Dunn & Dunn, 1979, 1992, 1993; Kolb, 1985, 2005; (Grasha & Yangarber-Hicks, 2000; Grasha 2002a, 2002b).

In addition, the harmony between teacher and student will also contribute positively to learning; the more parallel the dominant teaching style the teacher has and the dominant learning style the student has, the more process will complement both teaching and learning. Although there are studies dealing with learning and teaching styles both separately and together in literature (Babadoğan & Kılıç, 2012; Hussain & Ayub, 2012; Ünal, Dilbaz Alkan, Özdemir ve Çakır, 2013; Shaaria, Yusoff, Ghazali, Osman & Dzahir, 2014; Babayiğit, 2016), the fact that the number of studies that particularly examine and study the teaching styles of the preparatory class students and the teaching styles of their instructors together is quite limited (Maraş Atabay & Kurtman, 2013) has become one of the important justifications of this study. Current study aims at finding out whether there is a relationship between the teaching style preferences of the instructors teaching at the English preparatory classes at Anadolu University

School of Foreign Languages (AUSFL) and the learning styles of English preparatory students studying in the same program. With regards to this purpose, the answers for the following questions are investigating for:

- a. Which teaching styles do the instructors mostly prefer?
- b. What are the learning styles English prep class students mostly prefer?
- c. Is there a significant relationship between the teaching styles of the instructors and the learning styles of the prep class students?

2. Method

2.1 Research Model

Singular and correlational screening models were benefited to determine the relationship between the teaching style preferences of the participating faculty members at AUSFL and the learning styles of the English preparatory class students in the study. The screening model is used to describe the characteristics of large masses and is applied to describe the existing situations as they are, giving information about the source and distribution of the opinions and characteristics of the participants. (Büyüköztürk, Çakmak, Akgün, Karadeniz ve Demirel, 2014; Fraenkel ve Wallen, 2006).

2.2 Participants

A total of 183 English teaching staff, 136 of which were women and 47 male, were working at AUSFL, the institution where the study was conducted, and 2870 students were studying in the English prep class at the same institution during the spring semester of 2017-2018 academic year when the study was conducted.

Within the scope of the research, all academic staff were tried to be reached and 98 academic staff were included in the research. A total of 68.4% of the teaching staff participating in the study were women and 31.6% were men. On the other hand, the age range of the majority of the participants was 36-40 (30.6%). In addition, 80% of the participants (81.6%) were graduates of English language teaching department. The vast majority of participants had over 10 years of professional experience.

However, due to the high number of students attending prep class, a sampling was made, and 20% of the students were tried to be reached by random selection. In this context, 574 students were included in the research. However, since 69 of the students filled the scales incompletely, they were excluded from the research process. Accordingly, a total of 505 students were reached. 52.7% of the students participating in the study were male students and 47.3% were female.

2.3 Data Collection

Questions that were created for demographic information (gender (instructor-student), experience (instructor), graduated department (instructor)) belonging to both groups were applied with scales. In order to determine the teaching styles of the instructors, the Turkish

version of Grasha and Reichmann Teaching Style Scale (GRTSS) that was adapted by Sarıtaş & Süral (2010) was used. Grasha and Reichmann Learning Style Scale (GRLSS) that was also adapted to Turkish language by Sarıtaş & Süral (2010) was used to determine the learning styles of the students.

The Grasha and Reichmann Teaching Style Scale (GRTSS) scale is a five-point Likert-type scale consisting of a total of 40 items. These items have five sub-dimensions. Each sub-dimension in the scale had eight items. The subdimensions in the scale were listed as (1) expert, (2) formal authority, (3) personal model, (4) facilitator ve (5) delegator. The teaching styles were ranked by Grasha and Reichmann in three levels as "low", "moderate" and "high". (Sarıtaş & Süral, 2010). The degrees of teaching styles with their minimum and maximum ranges are shown in Table 1.

Table 1. Ranges of Teaching Styles in GRTSS

Teaching Styles	Degree of Teaching Styles							
	Low Moderate		High					
Expert	[1.0 - 2.8]	[2.9 - 3.8]	[3.9 - 5.0]					
Formal authority	[1.0 - 1.8]	[1.9 - 3.0]	[3.1 - 5.0]					
Personal model	[1.0 - 2.8]	[2.9 - 3.4]	[3.5 - 5.0]					
Facilitator	[1.0 - 2.9]	[3.0 - 4.0]	[4.1 - 5.0]					
Delegator	[1.0 - 1.8]	[1.9 - 2.8]	[2.9 - 5.0]					

(Taken from: Sarıtaş & Süral, 2010)

As it can be seen in Table 1, the minimum and maximum limits of the low, medium and high levels of each teaching style are expressed with different values ranging between 1 and 5. Language validity correlation of GRTSS was found as .80 Cronbach Alfa in the adaptation study conducted by Sarıtaş and Süral (2010), and the reliability coefficient was .87. As for the present study, the Cronbach Alpha reliability coefficient was .85.

Grasha and Reichmann Learning Style Scale (GRLSS) scale is a five-point Likert type scale consisting of 60 items with six sub-dimensions. Subdimensions of GRLSS were listed as (1) independent, (2) avoidant, (3) collaborative, (4) dependent, (5) competitive, (6) participant by Grasha and Reichmann. As in GRTSS, learning styles were also ranked as low, moderate and high with some values between 1 and 5 (Sarıtaş & Süral, 2010). The degrees of learning styles with their minimum and maximum ranges are shown in Table 2.

Table 2. Ranges of Learning Styles in *GRLSS*

	Tuble 2. Italige	o of Bearining Styles	III OTTEDD					
Learning	I	Degree of Learning S	ee of Learning Styles					
Styles	Low	Moderate	High					
Independent	[1.0 - 2.7]	[2.8 - 3.8]	[3.9 - 5.0]					
Avoidant	[1.0 - 1.8]	[1.9 - 3.1]	[3.2 - 5.0]					
Collaborative	[1.0 - 2.7]	[2.8 - 3.4]	[3.5 - 5.0]					
Dependent	[1.0 - 2.9]	[3.0 - 4.0]	[4.1 - 5.0]					
Competitive	[1.0 - 1.7]	[1.8 - 2.8]	[2.9 - 5.0]					
Participant	[1.0 - 3.0]	[3.1 - 4.1]	[4.2 - 5.0]					

(Taken from: Sarıtaş & Süral, 2010)

As it can be seen in Table 2, each learning style is presented within the minimum and maximum limits of the low, medium and high levels ranging between 1 and 5. Language validity correlation of GRLSS was found as .62 Cronbach Alpha in the adaptation study conducted by Sarıtaş and Süral (2010), and the reliability coefficient was .80. As for the present study, the Cronbach Alpha reliability coefficient was .85.

During the data collection process, data collection tools were delivered to both faculty members and students via e-mail. The main reason for preferring this method was to reach all participants and its being more environmentally friendly. The instructors were asked to answer the scale within one week and when the given time expired, the teachers who had not yet responded were sent a message via e-mail and were reminded to answer the scale.

Students were given a two-week time to answer the scale. After the two weeks, a reminder email message was sent to the students who had not yet responded. In addition, various reminders were made through faculty members. The scale was closed to respond three weeks after the first submission date.

2.4 Data Analysis

In the process of analyzing the responses of teachers and students to data collection tools, number, percentage and arithmetic mean were used, and in order to determine the relationship between the learning style and teaching style, Pearson Moment Product Correlation Analysis was used. Statistical significance level was determined as .05 in the study, and all the statistical proceedings of the data were done through the SPSS package program.

3. Findings and Discussion

A total of 98 (53.5%) of the teaching staff and 505 (17.5%) of the students have answered the scale. Considering the universe size of the study, it can be stated that the number of participants met the level of confidence 5.68% of error for the teachers and with a 3% error for students with a reliability of 90% (Gay, 1987; cited in, Arlı and Nazik, 2001).

Considering the findings of the study in the context of research questions; the answers to the first research question, "Which teaching styles do the instructors mostly prefer?" were determined based on the average values obtained for the teaching styles. The average values that indicated each teaching style the teachers were shown in Table 3.

Table 3. Average values of each teaching style for participant teachers

	Expert	Formal Authority	Personal Model	Facilitator	Delegator
Average	3,83	3,66	3,84	3,93	3,51
Degree	Moderate	High	High	Moderate	High

As seen in Table 3, the mean values are 3.83 for the *expert* teaching style; 3.66 for *formal authority* teaching style; 3.84 for the *personal model* teaching style; 3.93 for *facilitator* teaching style, and 3.51 for *delegator* teaching style. These findings indicate that teachers have a high degree of teaching styles except for *expert* (3.83) and *facilitator* (3.93) teaching styles. However, the fact that the *expert* teaching style has a borderline value, which is very close to high between the moderate and high degrees, hence, the teachers can be interpreted to have this

teaching style at a high level relatively. Based on these findings, it can be stated that the teaching staff who participated in the study have used teaching styles above the average values.

The answers received in the context of the second research question, "What are the learning styles that English prep class students mostly prefer?" were analyzed by considering the average values determined by Grasha and Reichmann for learning styles as well. Within the light of the answers given by the participants to the second research question, the average values of the learning styles were shown in Table 4.

Table 4. Average values of each learning style for participant students

	Independent	Avoidant C	ollaborative	e Dependent	Competitive	Participant
Average	3,67	2,85	3,71	3,81	2,95	3,56
Degree	Moderate	Moderate	High	Moderate	High	Moderate

As seen in Table 4, while the average value for the *independent* learning style is 3.67, it is 2.85 for the *avoidant* learning style, 3.71 for the *collaborative* learning style, 3.81 for *dependent* learning style, 2.95 for *competitive* learning style and 3.56 for *participants*. learning style acvordingly. These findings reveal that students had a high degree of *collaborative* (3.71) and *competitive* (2.95) learning styles, while all other learning styles were at the moderate level. Based on these findings, the students participating in the study can be said to use all learning styles at a moderate level at least.

In order to answer the third research question, "Is there a significant relationship between the teaching styles of English instructors and the learning styles of preparatory class students?" Pearson Moment product correlation analysis was applied. Considering the average values of teaching styles of the teachers and learning styles of the students, the primary teaching style components and the average values of the learning styles they supported determined in sets by Grasha (1994) were examined and interpreted. The correlation analysis results are shown in table 5.

Table 5. Relationship between teaching styles of teachers and students' learning styles

Learning Style													
			Indp.		Avoi.		C	Coll.		Dep.		Comp.	
Part.													
Teaching	r	p	r	p	r	p	r	p	r	p	r	p	
Style													
Expert	02	.79	.06	.52	11	.27	12	2 .21	.13	.19	05	.56	
Formal au	12	.20	20	.04*	08	.40	0	9 .34	.17	.07	.08	.42	
Personal m	17	.08	13	.17	.02	.77	.01	1 .88	.22	.03*	.09	.33	
Facilitator	06	.51	.03	.73	.02	.80).	00 .99	.16	.11	.02	.84	
Delegator	04	.69	04	.63	01	.90	1	13 .19	.16	.10	.06	.53	

^{*}P≤.05

As can be seen in Table 5, a significant relationship was identified between some teaching and learning styles. A significant relationship was found between *formal authority* teaching

style and *avoidant* learning style (p=.04). Similarly, there was a significant relationship found between *personal model* teaching style and *competitive* learning style (p=.03). No significant relation was found among the other teaching and learning styles. When the teaching and learning styles that have a significant relationship among each other are analyzed in the context of Grasha's (1994) teaching style components sets (Durmuş, Alan, & Güven, 2018), considering the characteristics of the expert-authority teaching style group forming the first set, actually it will be seen that teachers who belong to this group do not appeal to students with avoidant learning style. In this framework, finding the direction of this relationship has become important.

Although there was a significant relationship between personal model teaching style and competitive learning style, this learning style does not match the learning styles supported by the personal model, which is one of the primary teaching styles of the second set of Grasha's teaching style components (supported learning styles are participant, dependent and collaborative). This situation can be explained by the fact that the teachers had almost all teaching styles at relatively high levels.

On the other hand, examining the average values of the teaching style set components defined by Grasha (2002) and learning styles they support, we see that the primary teaching styles in the first set, the expert (3.83-moderate) and the authority (3.66-high) are parallel with the learning styles they support; participant (3.56-moderate) and competitive (2.95-high).

As for the primary teaching styles in the second set, personal model (3.84-high), expert (3.83-moderate) and authority (3.66-high) had compatible results with participant (3.56-moderate), dependent (3.81-moderate) and collaborative (3.71-high) learning styles which were the ones they supported. The teaching styles that constituted the third set, expert, personal model and facilitator model (3.93-moderate) can be said to have parallel results with the learning styles they supported as well. Those learning styles were collaborative, participant and independent (3.67-moderate). The primary teaching styles of the fourth model and the last set, delegator (3.51-high), facilitator and expert can also be said to have compatibility with the independent, collaborative and participant learning styles which were the ones they supported.

The findings of the study revealed that the teachers stated to have almost all teaching styles at high levels except for expert and facilitator teaching styles which were at upper borderline moderate level. Similarly, the students had at least a moderate level of all learning styles. Considering that the fact that both participant groups, either the teachers or the students were at university level, the findings of the study can be said to coincide with the findings of previous studies in the literature. Dunn & Dunn (1979) and Kolb (1985), Grasha (1994, 2002) stated that both teachers and students did not have a single teaching style or a single learning style; hence, they can benefit from more than one style when necessary.

It can be said that among the reasons for obtaining such findings were the impact of the pedagogical education background and continuous in-service training provided for the teachers in the institution the study was conducted. Moreover, language teaching itself was considered among the reasons as well. As for the learning styles, all of the students participated in the study had a learning experience of at least 12 years. They had different experiences at different levels of their education. Thus, they have developed various approaches to use learning styles. Especially, focusing on different goals at different stages of their education such as taking exams for being accepted to a college or university force students to apply various styles and

strategies. This was thought to be the main reason for them to have at least moderate level of all learning styles.

When the studies carried out on teaching styles in the literature are examined, it can be stated that they show some differences with the findings of present study. In a study conducted with Turkish language teachers delegator, it was found that personal model teaching styles had the highest range whereas the expert teaching style had the lowest (Maden, 2012). On the other hand, the most preferred teaching styles by religious culture and moral knowledge teachers were expert and delegator (Arpacı, 2013). Üredi and Güven (2013) stated that while primary and secondary school teachers preferred teaching styles in the Facilitator / Personal model / Expert set at the highest level, they preferred the teaching styles of Personal model / Expert / Authority which constituted the second set at the lowest level. Another study revealed that primary school teachers mostly had expert, facilitator and delegator teaching styles (Bilgin & Bahar, 2008). On the other hand, in a study that compared the teachers in the United States and Turkey in terms of teaching style preferences, it was found out that Turkish teachers preferred Facilitator/Personal model/Expert teaching style set the highest (Gencel, 2013). These findings overlap largely with the findings of the study conducted by Üredi and Güven (2013).

Compared with different studies, the findings of present study showed that all teaching styles are highly preferred and no style predominates. Aydın (2017) stated that using different teaching techniques while teaching different skills such as speaking, writing, listening, grammar and vocabulary at the same time and continuously developed positive insights on English and other language teachers, and reflections of this phenomenon could be observed in their teaching style preferences. As for this study, the fact that the teachers had all teaching styles at least upper borderline moderate level was regarded to be related with teaching experience, field and participation to in-service training. Furthermore, the effective communication skills and the humanistic approaches the teachers displayed were thought to be due to the unique characteristic of foreign language teaching, and the methodology they had learned during their education.

Examining the studies that focused on learning styles, the studies that are conducted using various learning style scales and inventories are remarkable. Ünal, Alkan, Özdemir ve Çakır (2013) used Kolb's Learning Style Inventory and found out that the majority of the students had assimilating learning styles. Studying on the definition made by Kolb on assimilating learning style, those students' being talented in decision making, focusing on their ideas, having multiple perspectives and being independent (Güven, 2004) resemble the characteristics of students who have independent learning style. The independent learning style had a value of 3.67 at a moderate level in this study.

Besides, Bakır and Mete (2014), conducted a study focusing on learning styles of secondary school students using Grasha-Riechmann Learning Style Scale in terms of different variables (gender, grade, education background of parents, socio-economic status, and academic achievement in science and technology lessons). The findings of the study revealed that learning styles differed significantly according to gender, grade, education background of parents and socio-economic status. In another study using Grasha-Riechmann Learning Style Scale, Bilgin and Durmuş (2003) compared the difference between the learning styles of secondary school students from two different schools and examined the relationship between learning styles and student success. The findings of this study revealed that there was no

difference between schools, but there was a significant relationship between success and learning styles.

In another study using the Grasha-Reichmann Learning Style Scale adapted to Turkish language by Sarıtaş and Süral (2010) was similar to the current study, Aydemir, Koçoğlu and Karalı (2016) aimed at finding out the learning styles of prospective teachers, and similar to the findings of the present study, thus, the competitive learning style was found at high level, and independent, dependent, participant, avoidant and collaborative learning styles were found to be at moderate level. However, competitive and collaborative learning styles were found at a high level in the current study.

Some of the studies in which teachers 'teaching styles and students' learning styles were handled together focused on the effect of teaching styles on student success. Shaaria, Yusoff, Ghazali, Osman and Dzahir (2014) conducted a study to determine the effect of teaching styles on student achievement, and they found out that teachers mostly use personal model teaching style, and this has affected student success positively. Considering the fact that personal model teaching style was also used by the participants at a high level in the current study, it can be predicted that this will also have positive effects on student success.

Of course, studies on learning styles are not limited to the above. There are plenty of studies in literature focusing on teaching and learning styles and comparing them with various variables such as success, gender and social factors. As for the current study, the learning style preferences of the students were identified and their parallelism with teaching styles of their teachers was interpreted.

4. Conclusion

In the current study, the teaching styles of English teachers and learning styles of students were determined independently. Studies aiming at determining the direct effect of teaching styles on students' learning styles are thought to be able to contribute positively to both teachers and students. The reflective studies that teachers will make on their own teaching and learning styles will also be beneficial in terms of developing their awareness in the context of learning and teaching style. Considering the issue from the side of students, it is recommended that determining the effects of learning styles of foreign language students on many factors in their academic lives will contribute positively to student success and teacher performance, although similar studies are observed in the literature.

The current study was conducted with participants from higher education levels. The working environment is a dynamic environment where faculty members have access to continuous in-service training, and postgraduate training opportunities are offered. Likewise, considering that students are at higher education level, it can be thought that their independent learning skills have developed and they are aware of their own learning responsibilities. It is thought that similar studies conducted at lower education levels such as primary or secondary education will contribute to shaping teachers' teaching styles according to the students and developing the learning styles of the students. In brief, the studies focusing on finding out teaching and learning styles the teachers and students jointly apply will contribute to all stakeholders in the process both in the program development stages and in enhancing the quality of classroom practices.

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